

that that continent was unconnected with New Guinea, and above all, dispelled the long-lived illusion of a great southern continent, having been the first to cross the Antarctic Circle. At high south latitudes he sailed nearly all round the confines of the Antarctic, adding greatly to a knowledge of the geography of this unknown region, and proving once for all, as we have said, that a "great southern continent" was a delusion, at least outside the Antarctic Circle. A comparison of the maps of 1762 and 1785 will serve to show how much was accomplished by Cook in this direction. In his second voyage of three years, 1772-75, Cook sailed over 20,000 leagues in the Pacific and Southern Oceans. And it was not only geographical knowledge that was thus advanced by his skill and determination. He was always accompanied by a staff of scientific specialists, to whom he gave every opportunity of pursuing research in their own departments, and thus of adding enormously to a knowledge of the natural history (in its widest sense) of great tracts of our globe. In the Transit expedition, for example, he was accompanied by the young Joseph Banks as naturalist. His third, and fatal voyage, was undertaken mainly for the discovery of a North-West Passage, Cook and Capt. Clarke sailing in the *Resolution* and *Discovery* from Plymouth in July, 1776, and after a roundabout voyage by the South Pacific, the Sandwich Islands were discovered on January 18, 1778. After attempting to penetrate the Arctic Ocean, he was compelled to turn back, and resolved to spend the winter in completing the survey of the Sandwich Islands. Here, as almost everywhere else that he went, Cook won the hearts of the natives by his gentle, firm, and perfectly upright dealing, in this respect being a pattern to all explorers. The end is too well known, and we need not repeat the details of the sad event which happened at Karakakooa Bay, on the south side of Hawaii, on February 14, 1779. No blame can be attributed to Cook, and, probably, very little to the natives themselves. Had the lieutenant who accompanied Cook on shore, and the sailors themselves, possessed a little of his tact and true bravery the catastrophe might have been prevented. There is reason to believe that the islanders regarded Cook as a sort of superior being, a kind of heaven-sent messenger whom they half-expected, and that they actually worshipped him as a god. Indeed it has been said that it was only when the first stunning blow from a club proved him human that their chagrin and disappointment vented themselves in barbarous massacre. There seems no doubt that the natives were sincerely sorry for what had occurred, and continued to worship his memory, if not his bones, for long after. It is commonly stated that his remains were obtained and buried in the sea, but we would refer our readers to a remarkable story published in *NATURE*, vol. viii. p. 211. From this it would seem that the large bones of Cook's body had been retained by the islanders, and tended and enshrined as those of a hero, if not of a deity. Whatever amount of truth there may be in the details of this story, it, along with other evidence, tends to prove that the catastrophe was a sad mistake, regretted by none more than the natives themselves.

Cook's instincts were thoroughly scientific, and he did all that his circumstances would admit of to qualify himself to carry on his great and important work on the basis of

scientific principles. The results show that all things considered science profited largely by his labours, and that to-morrow a foreign society will strive to keep green the memory of one of England's most scientific navigators, one of her ablest and most lovable sons.

#### THE SAMOAN LANGUAGE

*A Grammar and Dictionary of the Samoan Language.*

By the Rev. George Pratt. Second Edition. Edited by the Rev. S. J. Whitmee, F.R.G.S. (Trübner and Co., 1878.)

THIS is perhaps as complete a guide to the study of the Samoan language as could be expected under the circumstances. It consists, properly, of four parts: a grammar, which, for obvious reasons, is necessarily disappointing; a chapter on the native poetry, which would be much more useful were the specimens given accompanied by a translation, or at least by more copious notes; an English-Samoan vocabulary of about 4,500 fairly well-selected words, and a Samoan-English dictionary of more than double that number of terms. The editor informs us that many of the names of the indigenous flora and fauna collected by him still remain to be published. They will doubtless be embodied in the large "Comparative Polynesian Dictionary" he is now preparing, and when this is done we shall have at last a well-nigh complete dictionary of the most typical of the eastern Polynesian languages.

The grammatical portion of the work, notwithstanding the many extremely useful and suggestive additions of the editor, still leaves so much to be desired that we cannot but regret he did not re-cast this whole section, and give us a treatise more in harmony with the present state of linguistic studies. When we read in Mr. Pratt's preface that he was led to prepare a Samoan syntax "by observing, while reading Nordheimer's Hebrew grammar, that the Samoan in many points resembled the Hebrew," we feel at once that it would be hopeless to expect from him a sound exposition of the structure of this language, and the most cursory glance fully confirms this anticipation. Hebrew is a member of the Semitic family of languages, and is consequently an inflecting tongue. Hence it can have nothing beyond mere coincidences in common with the Eastern Polynesian group, which has scarcely yet got much beyond the isolating state, of which Chinese is typical. Its position, in fact, is quite unique, and until its true character is thoroughly realised we shall never get a rational treatment of the subject. This obvious truth was largely recognised by Gaussin, which at once explains the satisfactory nature of his work. Had it been based on the Samoan instead of on the Tahitian and Marquesan dialects, the result would doubtless have been still more satisfactory, and he would have avoided some of the misconceptions which detract from the value of that treatise. Yet even so it incidentally throws more light on the real genius of the Samoan itself than does the present work. Here the treatment of the verb is especially meagre and irrational. The schemes of tense and mood occupy less than two pages, and each tense is illustrated by a different verb, *pule* (rule) for the present, *alefa* (love) for the imperfect, *sao* (escape) for the perfect,

&c. The consequence is, that we get no general scheme at all of any given verb, which, however, is perhaps the less to be regretted, inasmuch as there are no true verbs at all in the language. These Eastern Polynesian tongues have certainly got beyond the purely isolating state of the Chinese, in which each root passes in its unmodified state directly into the sentence, where it becomes a true word only in virtue of its position. But they have not yet reached the next, or agglutinating state, because in them all parts of speech are not yet clearly differentiated. The so-called verb is merely a nominal predicate with the various temporal, personal, and modal relations more or less clearly expressed by determining particles. Hence the so-called second person present *e pule* 'oe, here rendered "thou rulest," is made up of the enunciative *e* equally applicable to present and future time, to the infinitive and to other words such as all the numerals (*e tasi* = one, *e lua* = two, &c., with which cf. *a* hundred, *a* thousand, &c.), of the noun *pule* = order, command, rule, and of the pronoun 'oe = thou. Thus, the whole expression merely attributes the rule or command, that is, *the thing* in a vague way to the subject, and seems scarcely to convey the idea of action, that is, of the use of the thing as does the true verbal form *regis*, thou rulest, in which the original nominal conception is completely absorbed in the idea of action. We thus see that the verb, as a distinct part of speech, is not yet developed, though there is an evident tendency towards its evolution. Hence these so-called verbs are incapable of any change to express mood, tense, person, and even the plural forms, in which reduplication plays such a large part, are adjectival, as may be seen by comparing *sīsina*, the plural of *sina* = white, with *nonofo*, the plural of *nofo* = to sit. On these plural forms the editor supplies some excellent supplementary matter at pages 13-16, which throws a strong light on the great influence of euphony in the development of language in its earlier stages. His remarks on the subtle distinction between the particles *a* and *o*, roughly corresponding to our possessive, are also very good. If to the active or transitive and passive or intransitive notions obviously involved in the use of *a* and *o* respectively, we add those of the *voluntary* and *involuntary* states, nearly all the difficulties will be removed, and the law may be confidently laid down that *a* is used with objects over which we have *free control*, *o* with those we possess, so to say, independently of ourselves, and which we must use in a definite way. Thus: *lona fale* = his house, *i.e.*, which he needs must use as a place of refuge or shelter; but *lana vā'a* = his canoe, which he can apply to twenty different purposes. So also in the Tahitian: *tā'u vā'a* = my canoe; *tō'u fare* = my house; for such is the amazing homogeneity of these eastern Polynesian languages that the most delicate distinctions are often found to pervade the whole group from New Zealand to Hawaii, or from Samoa to Easter Island after a separation in some cases of certainly not less than six hundred years.

Mr. Whitmee's notes betray altogether such a deep insight into the true genius of this linguistic family that we earnestly hope, when another edition of this work is called for, he may be induced to suppress the author's grammar, and give us in its stead a thoroughly rational

treatment of the subject. It will then be also very desirable in all cases to give a literal, or at least a close, translation of the examples quoted in illustration of the various rules and principles laid down. Many phrases are given in the present edition which may be useful to those already acquainted with the language, but which, for want of such a translation, it is to be feared will be thrown away upon the ordinary student, who may not have the opportunity of consulting a teacher. In the actual condition of these languages particles necessarily play a very large part, and are constantly heaped up in the sentence to a degree that must be very perplexing to the beginner. Where possible these particles should be translated, and when this cannot be done, which is very often the case, their various functions in the sentence should always be carefully indicated. This may, no doubt, demand more space, but the space can be saved by giving fewer examples and explaining them thoroughly. A comparative table of Eastern Polynesian alphabets, illustrating the interchange of letters between the various dialects, and throwing some light on their peculiar phonetic system, would also be a desirable addition, and might be brought within the compass of one or two pages. But the essential point will always be to treat the language from a rational standpoint, independently of all fanciful Semitic, Aryan, or other affinities. The eastern Polynesian group has only just emerged from the isolating or lowest stage of human speech, and still hovers on the verge of the agglutinating or next stage, and must be dealt with accordingly. Hebrew, the classical tongues, English, French, and all others familiar to us, have passed upwards from the isolating through the agglutinating to the inflecting state, and have, therefore, little in common with Samoan, Maori, Tahitian, &c., beyond the faint reminiscences, still lingering on, of their former condition. When these simple truths are fully recognised grammarians may be expected to treat languages with some regard to their individual character.

A. H. KEANE

#### COAL AND IRON

*Coal and Iron in all Countries of the World.* By M. Pechar. (Manchester and London: John Heywood, 1878.)

AMONG the results of the International Exhibition at Paris which has just closed its doors, the reports and other permanent records of the actual condition of the great industries of the world are certainly not the least valuable. Even where, as in the case of the work now under review, the materials of comparison are not wholly or mainly derived from the Exhibition itself, still from it have been derived the desire and perhaps the opportunity to execute the work on so complete a scale.

The international character of the book is obvious from every part, even of the title-page; this is the authorised English edition; the subject it professes to treat is Coal and Iron in all Countries of the World; its author, M. Pechar, is a railway director in Teplitz, Bohemia. And it must be confessed that the contents of the book do not belie the title-page. Indeed, the first page of the General Remarks which introduce us to them would lead us to suppose that we were going to be treated to a